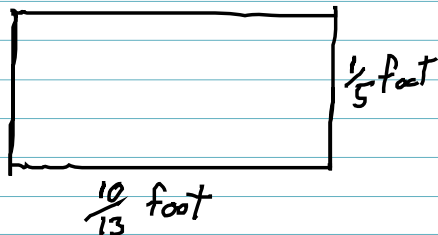


Math 0361

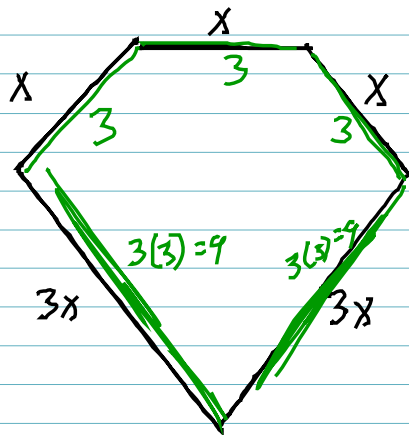
Practice Test 2

- 1) Find the area of the figure below
(The area of a rectangle is product of length and width)



$$\frac{10}{13} \cdot \frac{1}{5} = \frac{2}{13}$$

- 2) The perimeter of a geometric figure is ~~sum~~ sum of the lengths of its sides. The perimeter of pentagon is 27 cm. Find length of each side.



$$X + X + X + 3X + 5X = 27$$

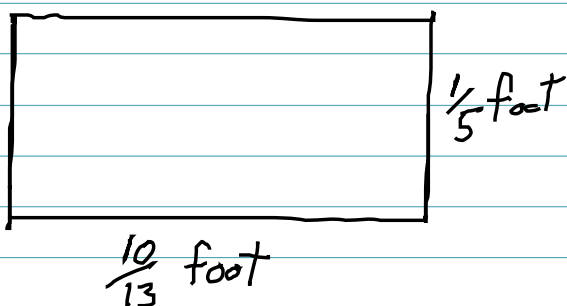
$$\frac{9X}{9} = \frac{27}{9}$$

$$X = 3$$

Math 0361

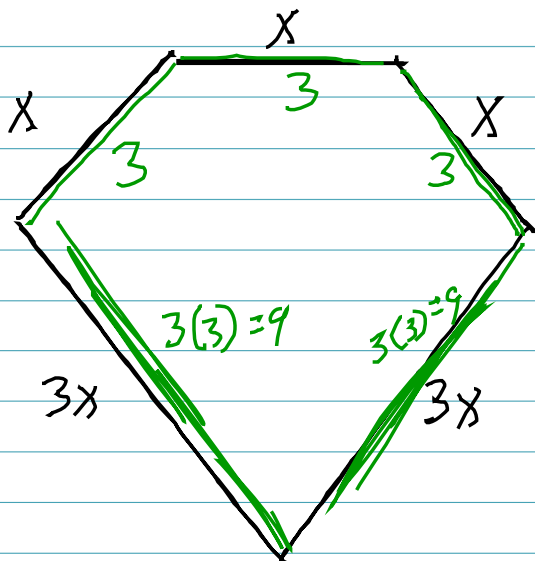
Practice Test 2

- 1) Find the area of the figure below
(The area of a rectangle is product of length and width)



$$\frac{10}{13} \cdot \frac{1}{5} = \boxed{\frac{2}{13}}$$

- 2) The perimeter of a geometric figure is ~~sum~~ sum of the lengths of its sides. The perimeter of pentagon is 27 cm. Find length of each side.



$$x + x + x + 3x + 3x = 27$$

$$\frac{9x}{9} = \frac{27}{9}$$

$$\boxed{x = 3}$$

Substitute given values and solve for unknown

3.

$$A = \frac{1}{2} (B+b)h; A=75, b=12, B=13$$

Find "h"

$$75 = \frac{1}{2} (13+12)h$$

$$75 = \frac{25}{2} h$$

$$\frac{150}{25} = \frac{25h}{25}$$

$$6 = h$$

4. $P = a + b + c$ $P=34, a=6$

$b=12$
Find c

$$34 = 6 + 12 + c$$

$$34 = 18 + c$$

$$\frac{-18}{-18} \quad \frac{-18}{-18}$$

$$16 = c$$

5. $C = 2\pi r$

$C = 69.08$

(Use 3.14 for π)

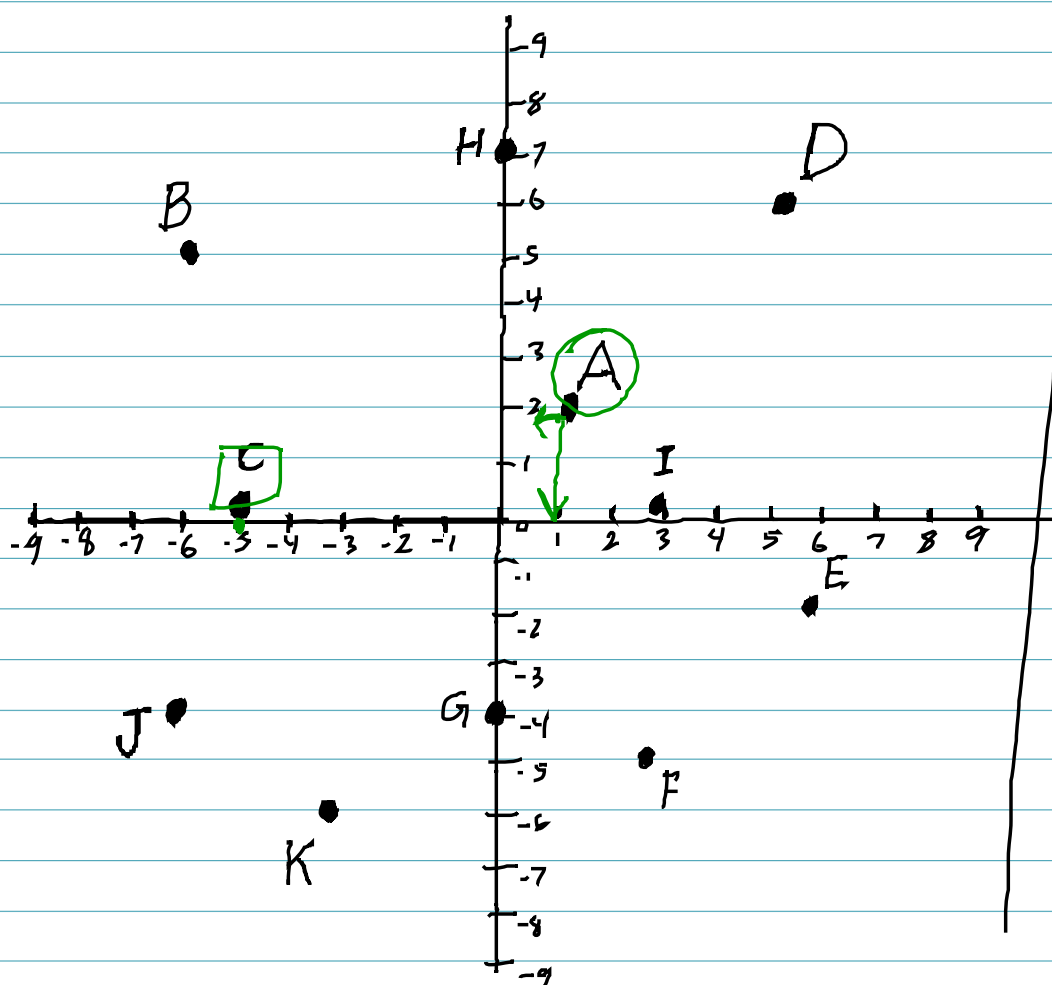
Find r

$$69.08 = 2(3.14)r$$

$$\frac{69.08}{6.28} = \frac{6.28r}{6.28}$$

$$11 = r$$

Use the graph to find x and y coordinates of plane



6. point A

(1, 2)

point C

(-5, 0)

7. Determine whether each ordered pair is a solution to given linear function

$$2x + 3y = 9$$

(6, -1)

$$2(6) + 3(-1) = 9$$

$$12 - 3 = 9$$

$$9 = 9 \quad \text{Yes}$$

(7, 0)

$$2(7) + 3(0) = 9$$

$$14 + 0 = 9$$

$$14 = 9 \quad \text{No}$$

Complete the table of ordered pairs for given linear equation

8.

$$y = -x + 6$$

x	y
0	6
6	0
-1	7

$$\underline{x=0} \quad y = -0 + 6$$

$$y = 0 + 6$$

$$\underline{y = 6}$$

$$\underline{y=0} \quad \begin{array}{rcl} 0 & = & -x + 6 \\ -6 & & -6 \\ \hline -6 & = & -x \\ \underline{-1} & = & \underline{-1} \end{array}$$

$$\underline{6 = x}$$

$$\underline{x=-1} \quad y = -(-1) + 6$$

$$1 + 6 = \underline{7}$$

9.

$$x + 3y = 9$$

x	y
0	3
9	0
-3	4

$$\underline{x=0} \quad 0 + 3y = 9$$

$$\frac{3y}{3} = \frac{9}{3}$$

$$\underline{y = 3}$$

$$x + 3(0) = 9$$

$$x + 0 = 9$$

$$\underline{x = 9}$$

$$\underline{y=4} \quad x + 3(4) = 9$$

$$x + 12 = 9$$

$$\underline{-12 \quad -12}$$

$$\underline{x = -3}$$

Complete Table of ordered pairs for the linear equation and graph

10. $X = -2y$

X	Y
-2	1
0	0
4	-2

$$y = 1$$

$$X = -2(1)$$

$$= -2$$

$$y = 0$$

$$X = -2(0)$$

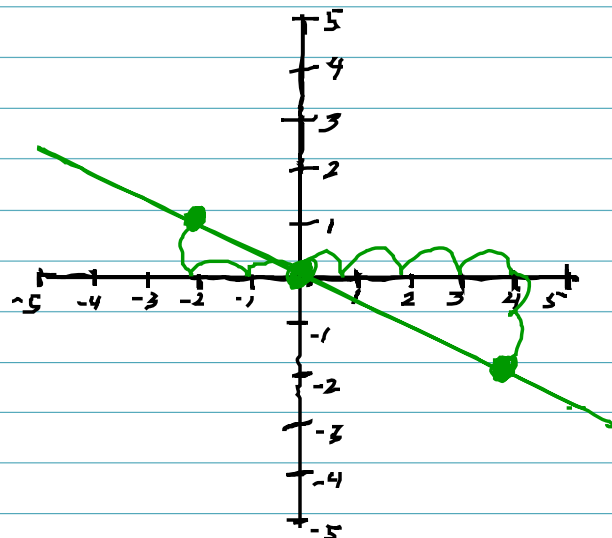
$$= 0$$

$$X = 4$$

$$4 = -2y$$

$$\frac{4}{-2} = \frac{-2y}{-2}$$

$$-2 = y$$



11. $y = -3x + 4$

X	Y
0	4
1	1
2	-2

$$X = 0$$

$$y = -3(0) + 4$$

$$0 + 4 = 4$$

$$X = 1$$

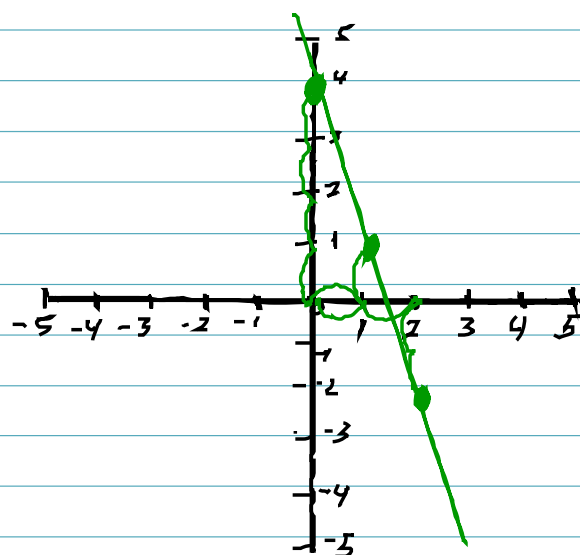
$$y = -3(1) + 4$$

$$-3 + 4 = 1$$

$$X = 2$$

$$y = -3(2) + 4$$

$$-6 + 4 = -2$$



Graph the linear equation

12. $y = 3x + 6$

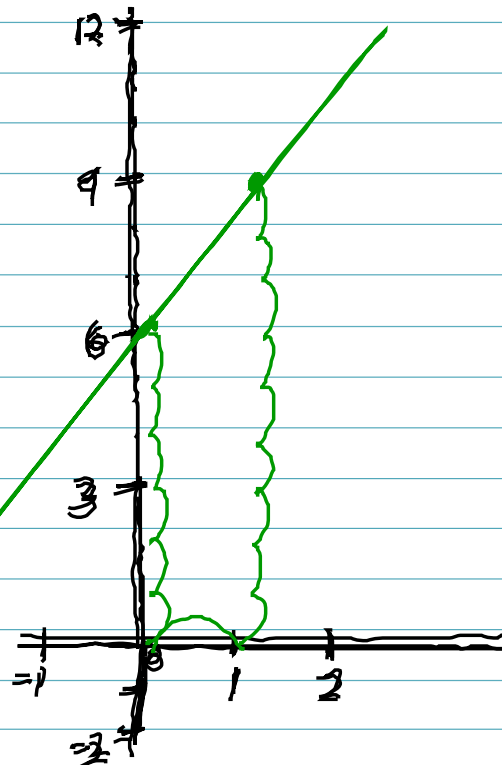
x	y
0	6
1	9

$$y = 3(0) + 6$$

$$0 + 6 = 6$$

$$y = 3(1) + 6$$

$$3 + 6 = 9$$



13. $x - y = 2$

x	y
0	-2
2	0

$$x = 0$$

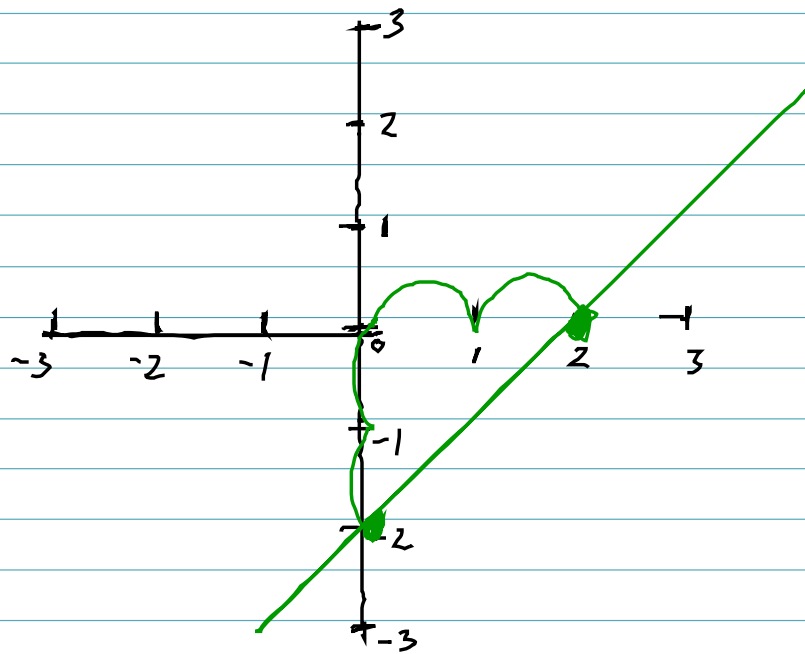
$$-y = 2$$

$$\frac{-y}{-1} = \frac{2}{-1}$$

$$y = -2$$

$$y = 0 \quad x - 0 = 2$$

$$\boxed{x = 2}$$

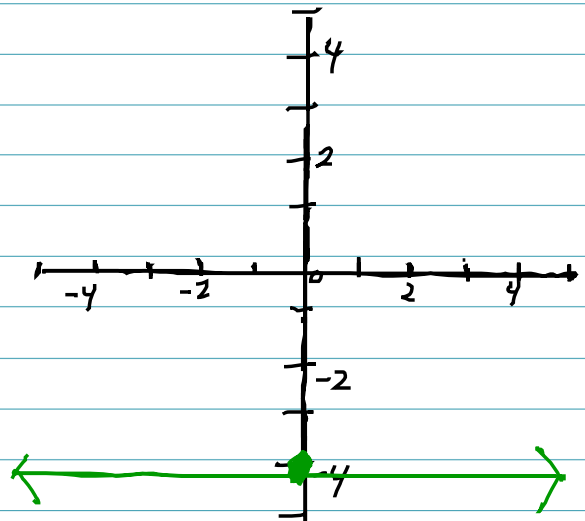


14. $y = -4$

if $y = \text{Any Number}$

Horizontal

Line



15)

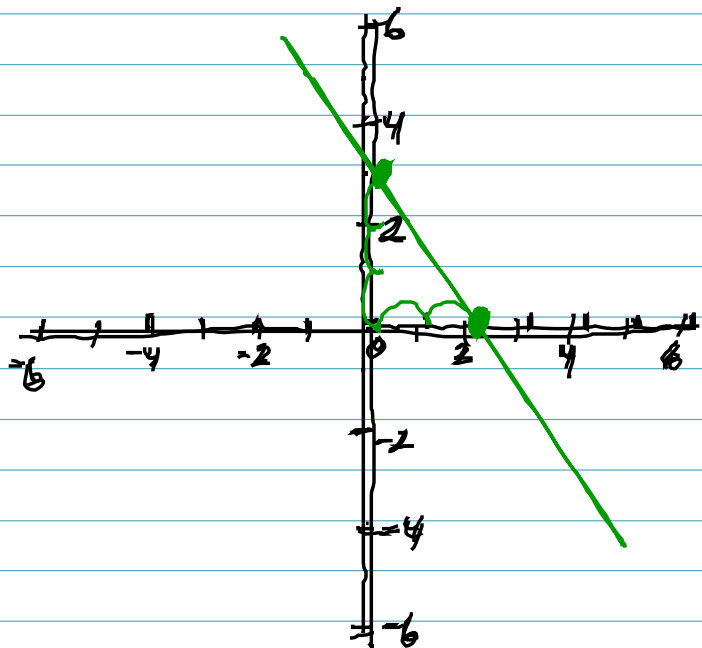
$$y = -\frac{3}{2}x + 3$$

x	y
0	3
2	0

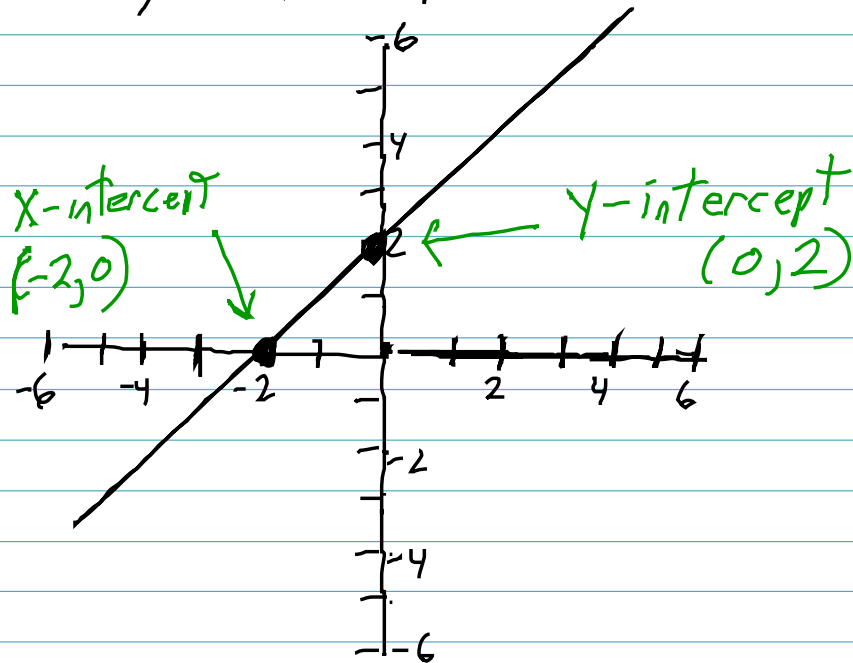
$$\begin{aligned} -\frac{3}{2}(0) + 3 \\ 0 + 3 = 3 \end{aligned}$$

$$\frac{-3(\cancel{2})}{2} + 3$$

$$-3 + 3 = 0$$



16) Identify the intercepts



17. Graph linear equation by finding and plotting its intercepts

$$x - y = -7$$

X	Y
0	7
-7	0

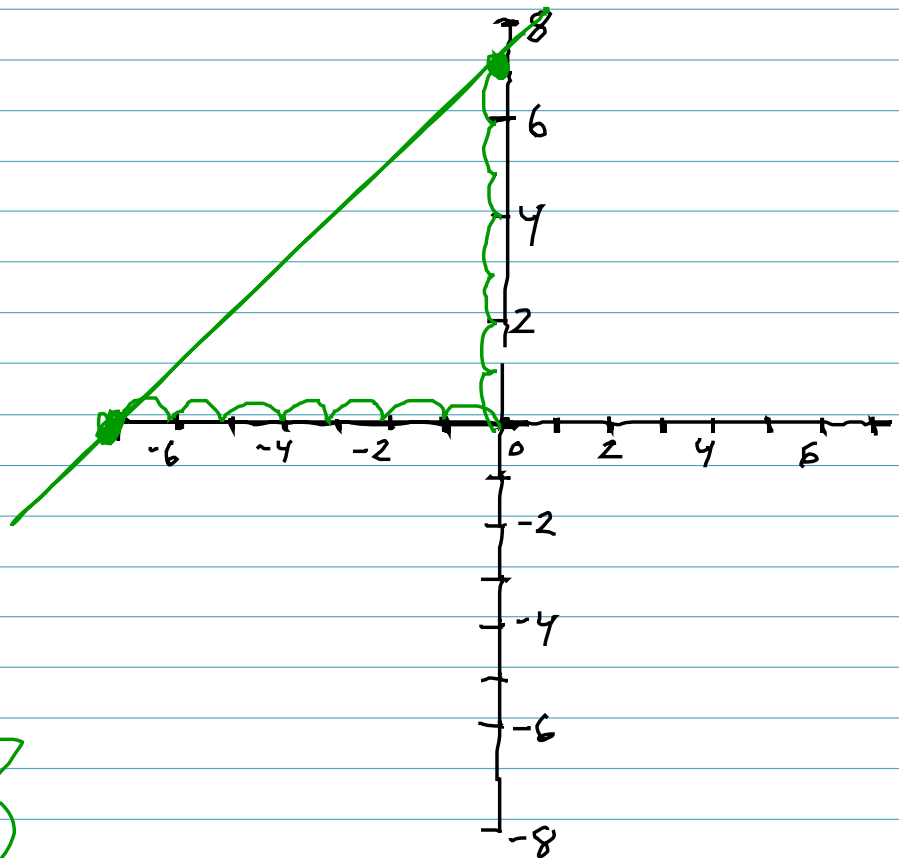
$$x=0 \quad 0 - y = -7$$

$$-y = -7$$

$$y = 7$$

$$y=0 \quad x - 0 = -7$$

$$x = -7$$



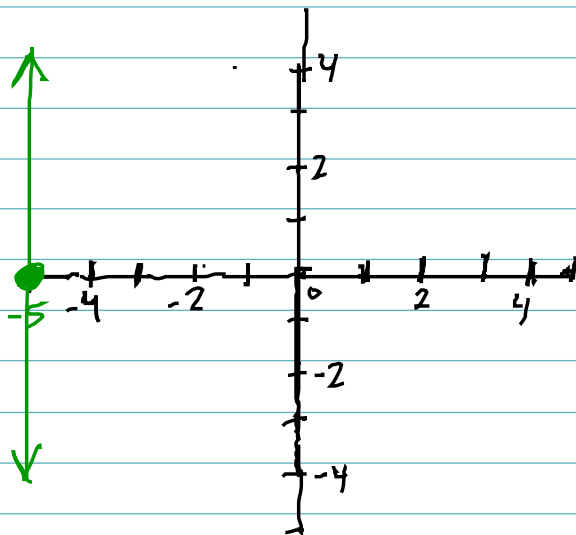
18. Graph the linear equation

$$x = -5$$

or $x = \text{Any Number}$

Vertical

Line



19. Graph the linear equation

$$x + 4y = -8$$

x	y
0	-2
-8	0

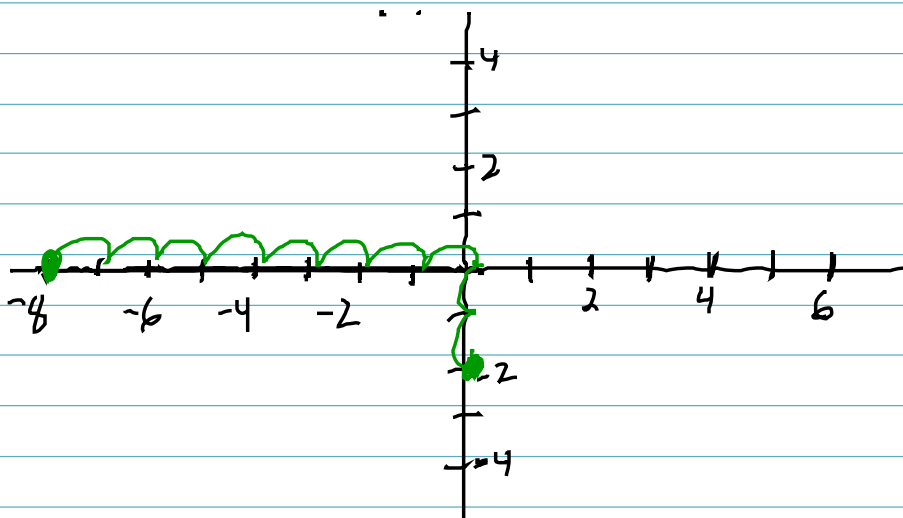
$$x=0 \quad 0 + 4y = -8$$

$$\frac{4y}{4} = \frac{-8}{4}$$

$$y = -2$$

$$y=0 \quad x + 4(0) = -8$$

$$x = -8$$



20. Simplify

$$\frac{-2-1}{2-8} = \frac{-3}{-6} = \frac{1}{2}$$